

Claims

1. Gap seal for sealing a gap (3) between two adjacent components (1, 2), in particular of turbo machines, with the following characteristics:
 - each component (1, 2) has one groove (7) that is open towards the gap (3),
 - the two grooves (7) are essentially facing each other in the gap (3),
 - a mutual sealing body (16) projects into both grooves (7),
 - in each groove (7), a compensation body (11) is movably positioned transversely to the longitudinal groove direction and parallel to the gap plane (10),
 - each compensation body (11) abuts the groove bottom (9) of the corresponding groove (7) in a sealing manner,
 - each compensation body (11) has a V-shaped receiving groove (14) that is open towards the facing compensation body (11),
 - the sealing body (16) has a rhombus-shaped cross-section and projects into both receiving grooves (14),
 - the straight inner sides (15) of each receiving groove (14) are angled towards each other at the same angle as the straight outer sides (17) of the section of the sealing body (16) projecting into them,
 - in each receiving groove (14), at least one outer side (17) of the sealing body (16) abuts the corresponding inner side (15) of the receiving groove (14) with surface contact and in a sealing manner.

2. Gap seal according to Claim 1,
characterized in that

the components (1, 2) are movable relative to each other in such a way that the gap width may change, whereby the sealing body (16) and the receiving grooves (17) have such dimensions that a minimum gap width can be realized, at which the components (1, 2) abut each other.

3. Gap seal according to Claim 1 or 2,

characterized in that

the groove bottom (9) in both grooves (7) is constructed level and extends parallel to the gap plane (10), whereby each compensation body (11) has a level bottom (13) that abuts the groove bottom (9) of the corresponding groove (7) with surface contact.

4. Gap seal according to one of Claims 1 to 3,

characterized in that

each groove (7) has a U-shaped cross-section in which facing, straight inside walls (8) of the groove (7) extend parallel to each other and vertical to the gap plane (10), and that each compensation body (11) has a U-shaped outer cross-section in which straight outside walls (12) facing away from each other extend parallel to the corresponding inside walls (8) of the groove (7), whereby a distance between the outside walls (12) of the compensation body (11) is smaller than a distance between the inside walls (8) of the groove (7).

5. Gap seal according to one of Claims 1 to 4,

characterized in that

at least one of the components (1, 2) is a guide vane or a rotor vane or a heat shield element of a turbine or of a compressor.

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